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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,343	08/01/2003	John B. Letts	P02030US2A(336)	3593

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EXAMINER

COONEY, JOHN M

ART UNIT	PAPER NUMBER
1711	

DATE MAILED: 03/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

LD

Office Action Summary	Application No.	Applicant(s)	
	10/632,343	LETTS ET AL.	
	Examiner	Art Unit	
	John m Cooney	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2 shts.</u> | 6) <input type="checkbox"/> Other: ____. |

Claim Objections

Claim 7 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim can not depend from another multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claim 7 has not been further treated on the merits.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "continuous" in claims 1-8 is a relative term which renders the claim indefinite. The term "continuous" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It can not be determined what effect of a limitation the term "continuous" adds to the term "in-line mixer". The claims are confusing as to intent because it can not be determined how an "in-line continuous mixer" differs from an "in-line mixer".

Claims 1-2 and 4-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "predetermined" in claims 1 and 2 is a relative term which renders the claim indefinite. The term "predetermined" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Claims are confusing as to intent because it can not be determined what effect of a limitation is being set forth by the recited flow rate defined as "predetermined". It can not be determined what is or is not a "predetermined" flow rate, and, accordingly, it can not be determined what limitation to the claim, if any, is being set forth.

Claims 1-2 and 4-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "desired" in claims 1 and 2 is a relative term which renders the claim indefinite. The term "desired" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Claims are confusing as to intent because it can not be determined what effect of a limitation is being set forth by the recited ratio which is defined as "desired". It can not be

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determined what is or is not a "desired" ratio, and, accordingly, it can not be determined what limitation to the claim, if any, is being set forth.

Claims 2-7 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims are confusing as to intent because a process for manufacturing a foam is set forth, but only a process for mixing and charging a polyol premix is set forth. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Soukup et al.(6,140,383).

Soukup et al. disclose a method for preparing isocyanate-based foams prepared by mixing a blowing agent and polyol batch and charging the polyol premix to a mixing

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head to be mixed with an isocyanate stream and dispensed for reaction to form a foamed product wherein pressures as claimed are employed and timing and processing operations meeting the conditions of applicants' claims are employed (see the examples, as well as, the entire document). Although Soukup et al. is not particular in its definition of the mixing of its polyol premixes, it is seen that general mixing to the degree described by Soukup et al. readily envisions the mixing as defined by applicants' claims.

Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Fishback (5,837,742).

Fishback discloses a method for preparing isocyanate-based foams prepared by mixing a blowing agent and polyol batch by means of an in line mixer and charging the polyol premix to a mixing head to be mixed with an isocyanate stream and dispensed for reaction to form a foamed product wherein timing and processing operations meeting the conditions of applicants' claims are employed (see column 21 line 12 – column 22 line 9, as well as, the entire document). Although Fishback is not particular as to the pressures of its charging of reactant, it is clear from the teachings that pumping of reactants rather than high pressure spraying is employed, thus, avoiding the exceedingly high up limits for mixing set forth by applicants' claims.

The following is set forth as an alternative to the above rejections under 35 USC 102:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soukup et al. in view of Fishback.

Soukup et al. disclose a method for preparing isocyanate-based foams prepared by mixing a blowing agent and polyol batch and charging the polyol premix to a mixing head to be mixed with an isocyanate stream and dispensed for reaction to form a foamed product wherein pressures as claimed are employed and timing and processing operations meeting the conditions of applicants' claims are employed (see the examples, as well as, the entire document). Soukup et al. differs in that it does not refer to particulars of its polyols/blowing agent premixing operations. However, Fishback et al. teaches blending of polyol premixes for reaction with isocyanate by means of an in-line mixer for the purpose of achieving adequate blending (see column 21 line 12 – column 22 line 9, as well as, the entire document). Accordingly, it would have been obvious for one having ordinary skill in the art to have employed the in-line mixing operations of Fishback as the premixing option within the processes of Soukup for the

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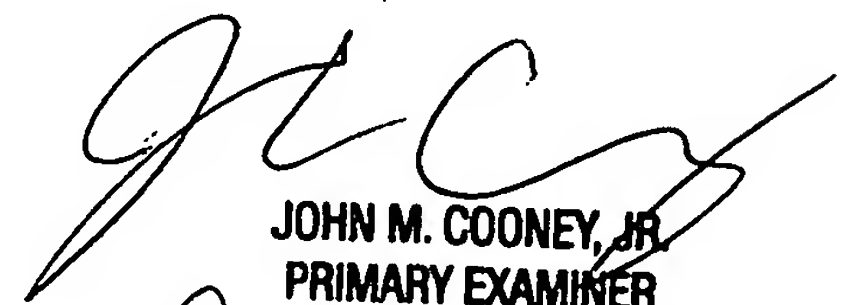
purpose of achieving the mixing effect in order to arrive at the processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Craig et al., Wishneski et al., and Armeniades et al. are cited for their disclosures of interesting mixing operations in the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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